

Verizon Massachusetts

Proposed Restructure of Intrastate Switched Access Service

In response to the Department's directive, Verizon Massachusetts (Verizon MA) has described two alternatives for reducing the current average price of intrastate switched access to the current average per minute price of interstate switched access. In both alternatives, the average price per minute of switched access is reduced and the rate elements are restructured to largely mirror the current interstate structure. The annual revenue impact of an immediate restructure and rate reduction will be approximately \$51.9 million. If the reduction and rate structure is phased in over two or three years, the rate reduction for each year of the phase-in is approximately one half or one third of \$51.9 M.

Following is a description of Verizon MA's current intrastate switched access service offering and an explanation of the proposed changes.

Current Intrastate Switched Access Service:

Verizon MA's intrastate switched access offering is a wholesale service provided to interexchange carriers (IXCs) for the transmission of calls, within the state of Massachusetts, between end-user customers and the IXCs. Verizon MA's switched access offering provides for origination and/or termination of carrier access traffic between the end-user customer and the IXC's point of presence (POP). IXCs can select to have traffic routed to the end offices via direct (dedicated) transport facilities, via an access tandem, or a combination of direct and tandem routings based upon their needs and the location of their end-user customers. Dedicated transport facilities are flat-rated (between end office and POP serving wire center (SWC) and tandem routed traffic is rated on a per MOU and per MOU / per mile basis (between end office and POP SWC, through an access tandem).

Verizon MA's current intrastate switched access offering is composed of three general components: 1) Carrier Common Line; 2) Local Switching; and 3) Local Transport.

1. Carrier Common Line (CCL): Currently, Carrier Common Line is a rate element used for ~~used for~~ contribution.
2. Local Switching: Provides the functions necessary to complete the transmission of switched access communications to and from end-users served by the local end-office.
3. Local Transport: Provides the transmission facilities between the IXC POP and the end-office switch where the customer's traffic is switched to originate and/or terminate its communications and includes the transport between end-office host and remote switches that is necessary when a remote switch serves the end-user customer.

IXCs that choose to transport their traffic through access tandems using Tandem Switched Transport service (TST) incur per minute charges for the use of local transport facilities between the end office and POP SWC. IXC's who choose to transport their traffic over dedicated facilities using Direct Trunk Transport service (DTT) between the POP SWC and the end-office serving the customer pay fixed monthly rates for Local Transport. The charges for Entrance Facilities (EF) connecting the POP and POP SWC are also assessed to IXC's via fixed monthly rates. The customer has the option of obtaining term discounts for their EFs and DTT services via the current Commitment Discount Plan (CDP). In addition, the current rate structure contains a transport Interconnection Charge (IC) that is assessed to IXC's for every intrastate switched access Minute of Use (MOU) transported to/from an end-office.

Verizon MA's current intrastate switched access per minute rate structure also includes discrete rates for 1) the direction (Originating and Terminating); 2) time period (Peak and Off-Peak); and 3) type (Outward and Inward) of the call. The development of current revenues is contained in Workpaper 2 to this attachment.

Proposed - Intrastate Switched Access Service:

The intent of the restructure of switched access service is to align the rate structure (i.e., flat vs. measured) with the facility selected by the carrier (either dedicated or shared). Under the proposed restructure, IXC's would pay fixed (flat) monthly rates for network components dedicated to the IXC's sole use, and per minute rates for network components shared by many providers. The restructure of intrastate switched access service in MA to the interstate rate structure will also permit additional choice for interexchange carriers. By unbundling the components of tandem switched transport (TST), IXC's that utilize, or decide to utilize, alternate transport services provided by carriers that collocate at access tandems, will have more control over the transport costs for the facilities connecting access tandems to POP SWCs (e.g. DTT and Multiplexing).

Restructuring intrastate switched access requires the elimination of certain existing elements, introduction of new, more discrete, elements, and setting rates for most elements equal to the current interstate rates. The following two sections describe: A) the structural changes required, and B) the revenue effects associated with the restructure and rate changes.

A. Structural Changes

The three categories of rate elements of intrastate switched access service (carrier common line, local switching and local transport) encompass a variety of discrete functional sub-parts. The restructure requires disaggregation and elimination of certain of these sub-parts. Following is a rate element level comparison of the components included in the current and proposed access structure. Please refer to Chart 1 for a diagram of the current Massachusetts intrastate access structure, and Chart 2 for a diagram of the proposed intrastate access structure. These diagrams depict the variety of rate elements

employed in the provision of switched access service, along with the pricing method for these elements.

Generally, the *carrier common line* charge is eliminated, *Local switching* is separated into the end-office switching and trunk port components and *Local Transport*, specifically Tandem Switched Transport, undergoes the greatest transformation.

I. Carrier Common Line (CCL):

Currently, CCL is a contribution element for intrastate switched access. Under Verizon MA's proposal, this component of switched access is eliminated.

II. Local Switching:

End-Office local switching is currently a single element providing IXC's access to the end-office and performing the necessary switching to receive a call from or terminate a call to the appropriate end-user line. Under the proposed restructure, these two functions are furnished through discrete rate elements. The restructured rate elements are:

Local Switching - provides the switching functionality and is assessed on a per minute of use basis.

End-office trunk ports - provide a termination into the end-office switch for the local transport. Depending upon the type of transport utilized (DTT or TST), the trunk ports are offered on a flat-rated (DTT) or per-minute (TST) basis. Again this structure aligns dedicated and shared facilities with the rate structure.

III. Local Transport:

Entrance Facilities - provide connections between the Interexchange Carrier's point of presence (IXC POP) and the end-office serving the IXC POP. The structure of the entrance facility element is unchanged under this proposal.

Direct Trunk Transport (DTT) - provides dedicated transport between the end-office serving the IXC's POP and the end-office serving the end-user customer. DTT also is unchanged in the proposal because its structure currently mirrors the interstate offering. Under the proposed restructure, DTT also becomes a required component of TST (see below).

Tandem Switched Transport (TST) - provides for the transport, through an access tandem, between the end-office serving the IXC POP and the end-office serving the end-user customer. Currently, the TST option used by IXCs is comprised of three rate elements: 1) TST Local Transport Termination; 2) TST Local Transport Facility; and 3) TST Tandem Switching. (Please refer to footnote 1).

Under the proposed restructure, TST is unbundled to the discrete network functions utilized in the provision of such transport. The following changes are made to this service option:

1. *Required Direct Trunk Transport (DTT)*: In addition to being an option available on a stand-alone basis, DTT is required to provide transport between the end-office serving the IXC POP and the access tandem. The DTT rate structure (i.e. fixed and per mile charges) is utilized for this leg of transport.
2. *Unchanged Multiplexing*: To the extent required, monthly multiplexing charges apply to convert the DTT facility into the appropriate transmission speed accepted at the access tandem.
3. *New Tandem Dedicated Trunk Port*: Entrance into the access tandem will be provided through a dedicated trunk port.
4. *Modified Tandem Switching*: Transmission of calls through the access tandem continues to be performed through the tandem switching element. This element is provided on a minute of use basis. The termination at the access tandem is now provided through the Tandem Dedicated Trunk Port element. (See item 3 above)
5. *New Transport Multiplexing*: Each minute of use will incur a transport multiplexing charge to provide for the variety of facilities that may be used to deliver a call between end-office wire centers and access tandems.
6. *Modified Local Transport Termination and Local Transport Facility*: Both elements are modified to limit the application of the associated charges. Currently these elements are composed of two legs of transport: 1) between the end-office serving the IXC POP and the access tandem and 2) between the access tandem and the end-office serving the end-user customer. The requirement to use DTT (see item 1 above) eliminates the need for the first leg of transport. Therefore, the proposed rate elements provide for transport between the access tandem and the end-office serving the end-user customer and are provided on a minute of use basis.

Interconnection Charge (IC), established during the initial Local Transport Restructure (LTR) as the contribution element for local transport. Under Verizon MA's proposal, this charge is eliminated.

New Host / Remote Transport: Currently, rates applied to the transport between end office host switches and remote switches are identical to the TST Local Transport Termination and Local Transport Facility rate elements. Under the restructure, separate rates are established specific to the transport provided between host and remote switches. The host remote termination element is provided on a minute of use basis and the host remote transport facility element is provided on a per minute per mile basis.

In addition to the restructure changes, per minute rates would be set consistently across all time periods and for both origination and termination of calls. With the elimination of "time-of-day" pricing, discrete rates for Outward and Inward calls is no longer needed and is, therefore, eliminated. The rates for most elements will be set at the current

interstate levels. In addition, the existing state Commitment Discount Plan (CDP) will be retained.

Two aspects of the interstate structure are not incorporated into the intrastate access structure:

First, the interstate Presubscribed Interexchange Carrier Charge (PICC) rate elements, which apply to multi-line business lines, are scheduled to be transitioned out of the interstate structure over time. Revenues recovered through these PICC charges will be transitioned to interstate per line end user charges (SLCs). As this element and the associated revenue is being moved to end user charges, there is no need to introduce it at this time into the state access structure.

Second, the interstate access structure currently provides for zone pricing of certain rate elements and a complex volume rate structure for DS3 entrance facilities. Rather than introduce these complexities into the current MA intrastate tariff, weighted intrastate transport rates for each rate element were developed. The state tariff would also retain the current DS3 volume structure (first plus additional), at the current rates, rather than introducing the complex interstate volume structure at this time.

B. Revenue Effects

The annual revenue impact associated with the switched access restructure is approximately \$51.9 M. This section outlines the demand development and pricing applicable to the restructured service offering. The detailed revenue effects associated with the proposed restructure are located in Workpaper 3, of this attachment.

Current Revenues:

Present (2000 annual) revenues are derived by multiplying current prices for intrastate switched access elements by the associated annual billing demand. Annual demand quantities are calculated by multiplying monthly demand (December 2000), obtained from billing records, by a factor based upon the relationship between December revenues and the year 2000 revenues. Workpaper 2 of this attachment displays the results of this revenue calculation.

Proposed Revenues:

In order to calculate the proposed revenue that results from a restructure of intrastate access service, demand quantities for both new and existing elements are determined. Workpaper 3 of this attachment contains a price-out of the restructured quantities and proposed rates.

Demand:

Demand quantities are determined using December 2000 billing data.

- Flat-rated elements: Current demand establishes the baseline for the proposed quantities of dedicated elements. Under the current intrastate structure, elements associated with Entrance Facilities and Direct Trunk Transport are the same facilities that are used to provide interstate service. The current intrastate demand for these elements is determined by applying a factor to the total demand for each element. The factor applied to total demand (to determine the intrastate allocation) is equal to one minus the percent interstate usage factor (PIU). The same methodology is used to develop the demand for the dedicated facilities required by the restructure for the DTT and Dedicated Tandem Trunk Ports of the Tandem Switched Transport option and the End-Office Dedicated Trunk Port introduced for the Direct Trunk Transport option. The proposed demand for DTT is, therefore, greater than the current demand for these rate elements due to the addition of the incremental amount of intrastate facilities associated with the newly required dedicated facilities (Tandem to POP SWCs) to the current demand.

- MOU-rated elements: As with the flat-rated elements, the demand for the proposed structure starts with the current demand quantities. Under the restructure proposal:

1. Carrier Common Line and Interconnection Charge MOU are eliminated;
2. Local Switching and Tandem Switching MOU are unchanged;
3. TST Local Transport Termination (LTT) and TST Local Transport Facility (LTF) MOU are:
 - a. reduced to remove the mileage associated with the leg of tandem transport between the POP serving wire center and the access tandem; and
 - b. reduced to remove the usage and mileage associated with Host / Remote transport;
1. TST Tandem Multiplexing and Shared End-Office Trunk Port MOU are introduced and set equal to the modified level of TST Local Transport Termination MOU (item 3);
5. Host / Remote Local Transport Termination and Local Transport Facility MOU are identified separately. The TST LTT is equal to the difference between the current and proposed TST LTT. The TST LTF are equal to the host / remote usage and mileage removed in 3b above.

A comparison of current and proposed demand volumes is included on Workpaper 4 of this attachment.

Rates:

With limited exception, the proposed rates reflect the currently effective interstate rates for the same elements. Exceptions to this practice are as follows:

1. **Zone Pricing:** The interstate structure provides for discrete pricing by zone for Entrance Facilities, Multiplexing and Direct Trunk Transport. The proposed intrastate structure does not introduce zone pricing for intrastate transport services. Rather, the rates for entrance facilities and multiplexing are set equal to the weighted average rate of the interstate offering by applying the applicable interstate rate, by zone, to the intrastate demand by zone and developing a weighted monthly rate for each rate element. Weighting is not required for Direct Trunk Transport, because the same price applies to each zone.
2. **DS3 Rate Structure:** The interstate structure for DS3 Entrance Facilities is fairly complex to administer. Since the current intrastate rates are less than the average effective interstate rates and the demand is far less than the interstate demand, Verizon has chosen to maintain the current rate structure for DS3 Entrance Facilities in MA (first and additional).

Revenue Effects:

If the switched access rate restructure and rate reduction were implemented on a flash cut basis, the annual revenue impact is approximately \$51.9 M dollars. This impact is developed on Workpaper 1 of this attachment.

If a phased in approach were adopted, over a one or two-year period, the revenue impact would be approximately \$26.0 M and \$17.3 M respectively. This estimate is based upon current demand quantities.